

What is claimed is:

1. An applicator barrel with a finger grip comprising:

an applicator barrel body having an outer surface;
and

a three-dimensional tape connectable to a portion of said outer surface, said tape including a first surface and a second surface opposite said first surface, said first surface having formed thereon at least one integrally formed gripping structure on said first surface, said second surface being adhesive to connect said second surface to said outer surface of said barrel body.

2. The applicator barrel as recited in claim 1, wherein said at least one gripping structure extends outwardly from said first surface.

3. The applicator barrel as recited in claim 1, wherein said at least one gripping structure extends inwardly from said first surface.

4. The applicator barrel as recited in claim 1, wherein said three-dimensional tape includes a plurality of gripping structures.

5. The tampon applicator as recited in claim 4, wherein plurality of gripping structures form a box pattern.

6. The applicator barrel as recited in claim 4, wherein said plurality of gripping structures form a diamond pattern.

7. The applicator barrel as recited in claim 4, wherein said plurality of gripping structures form a box-diamond combination pattern.

8. The applicator barrel as recited in claim 4, wherein said plurality of gripping structures are arranged along at least one circumferentially row on said first surface.

9. The applicator barrel as recited in claim 1, wherein said at least one gripping structure has a height of approximately 0.003 inch or more from a base of said gripping structure.

10. The applicator barrel as recited in claim 1, wherein said tape has a width that is between approximately 0.5 inch and approximately 1.0 inch.

11. The applicator barrel as recited in claim 1, wherein said body has a circumference, and wherein said tape has a length that is approximately equal to the circumference.

12. The applicator barrel as recited in claim 1, wherein said tape is connected circumferentially around a portion of said outer surface of said barrel.

13. The applicator barrel as recited in claim 1, wherein said tape is formed of polypropylene.

14. The applicator barrel as recited in claim 1, wherein said first surface of said tape has an average gripping structure density of approximately 900 to 2500 per square inch.

15. The applicator barrel as recited in claim 1, wherein said barrel body is formed of a paper-based layer.

16. The applicator barrel as recited in claim 15, wherein said paper-based layer is selected from the group consisting of paper laminate and cardboard.

17. The applicator barrel as recited in claim 15, wherein said paper-based layer includes an outer surface with a coated layer.

18. The applicator barrel as recited in claim 1, wherein said barrel body is formed of plastic.

19. The applicator barrel as recited in claim 1, wherein said first surface of said tape has a higher coefficient of friction than said outer surface of said barrel.

20. The applicator barrel as recited in claim 1, wherein said barrel body has a forward end and a rear end, said tape being connected proximal to the rear end.

21. The applicator as recited in claim 1, wherein said second surface of said tape becomes adhesive upon heating of said second surface above a softening point temperature of said second surface.

22. The applicator barrel as recited in claim 21, wherein said tape comprises a nonwoven material.

23. The applicator barrel as recited in claim 22, wherein said nonwoven material is constructed from a polymer selected from the group consisting of copolyester, copolyamide, polyurethane and polyolefin.

24. A tampon applicator comprising:

said applicator barrel with a finger grip as recited in claim 1, said applicator barrel having a forward end and a rear end;

a plunger telescopically and slidably mountable in said applicator barrel through said rear end.

25. A method of forming a finger grip on a formed applicator barrel, the method comprising the step of:

connecting a three-dimensional tape onto an outer surface of said applicator barrel, said tape having a first surface and a second surface opposite said first surface, said first surface having at least one integrally formed gripping structure on said first surface, said second surface being adhesive to connect said tape onto said applicator barrel.

26. The method as recited in claim 25, wherein said tape is affixed to said applicator barrel of an assembled tampon applicator.

27. The method as recited in claim 25, wherein said second surface of said tape is detachably connected to an adhesive backed label, prior to connecting said tape onto said outer surface of said applicator barrel.

28. The method as recited in claim 25, further comprising the step of removing said tape from said adhesive backed label, prior to the connecting step.

29. The method as recited in claim 25, wherein said connecting step includes the step of heating said second surface of said tape to an elevated temperature so that said second surface becomes adhesive and bonds to said outer surface of said barrel.

30. The method as recited in claim 29, wherein said tape comprises a nonwoven material.

31. The method as recited in claim 25, wherein said at least one gripping structure extends outwardly from said first surface.

32. The method as recited in claim 25, wherein said at least one gripping structure extends inwardly from said first surface.

33. The method as recited in claim 25, wherein said three-dimensional tape is embossed to form said at least one gripping structure.

34. The method as recited in claim 25, wherein said three-dimensional tape is debossed to form said at least one gripping structure.

35. A method of forming an applicator barrel with a finger grip, said method comprising the steps of:

connecting a three-dimensional tape to a portion of a first side of a paper-based material blank, said tape including a first surface and a second surface opposite said first surface, said first surface having formed thereon at least one integrally formed gripping structure on said first surface, said second surface being adhesive to connect said tape

onto said first side; and

winding said blank to form said applicator barrel in which said first side forms an outer surface of said applicator barrel.

36. The method as recited in claim 35, further comprising the step of forming said blank from paper-based material.

37. The method as recited in claim 35, further comprising the step of securing a second sheet of paper-based material to said blank.

38. The method as recited in claim 35, wherein said blank is convolutedly wound.

39. The method are recited in claim 35, wherein said blank is selected from the group consisting of paper laminate and cardboard.

40. The method as recited in claim 35, further comprising the step of applying a coating to said first side of said blank, prior to connecting said tape.

41. The method as recited in claim 40, further comprising the step of curing said coating to form a coated layer to provide insertion comfort and reduced ejection force.

42. The method as recited in claim 41, wherein said coated layer has a coefficient of friction less than a coefficient of friction of said first surface of said tape.

43. The method as recited in claim 35, wherein said connecting step includes the step of heating said second surface of said tape to an elevated temperature so that said second surface becomes adhesive and bonds to said first side of said blank.

44. The method as recited in claim 35, wherein said at least one gripping structure extends outwardly from said first surface.

45. The method as recited in claim 35, wherein said at least one gripping structure extends outwardly from said first surface.

46. The method as recited in claim 35, wherein said three-dimensional tape is embossed to form said at least one gripping structure.

47. The method as recited in claim 35, wherein said three-dimensional tape is debossed to form said at least one gripping structure.